

UNLV

UNIVERSITY OF NEVADA, LAS VEGAS

Program Review Self-Study

Program Reviewed: Master of Architecture

Degrees: M.Arch.

Program Chair or Director: Dr. Steffen Lehmann

Dean: Dr. Nancy Uscher

Date of Report: 30 April 2019

GENERAL INSTRUCTIONS

1. **Please complete the program review self-study using this template.**
2. If this review is covering several degree levels, please be sure to address *each level* in your responses to the questions.
 - Dr. Rainier Spencer, Vice Provost for Academic Affairs: rainier.spencer@unlv.edu, 702-895-5833.
 - Nora Carroll, Academic Programs Analyst, eleonora.carroll@unlv.edu, 702-895-1888.
3. **Self-study submission:**
 - Send completed self-study electronically to rainier.spencer@unlv.edu and eleonora.carroll@unlv.edu.

I. Program Description

A. College/Department/Program

1. **College or School:** College of Fine Arts
2. **Unit:** School of Architecture; **Web Address:** architecture.unlv.edu
3. **Program being reviewed:** Architecture
 - a) **Degrees and their abbreviations:** Master of Architecture (M.Arch.)

B. Primary individual completing this worksheet

1. **Name:** Joshua Vermillion
2. **Title:** Graduate Coordinator, School of Architecture
3. **Date of self-study:** 1 March 2019
4. **Campus phone number:** 5-1905
5. **Mail stop:** 4018
6. **E-mail:** josh.vermillion@unlv.edu
7. **Fax number:** 5-1119

C. Other faculty involved in writing this report:

Dr. Steffen Lehmann, SoA Director; Prof. Daniel Ortega, SoA Associate Director; Prof. Glenn Nowak, previous SoA Graduate Coordinator

D. Catalog Description

Please insert the most recent catalog description(s) of the program(s). Due to display complications, the description must be typed into this form and not pasted from the catalog.

The School of Architecture offers a NAAB accredited Master of Architecture professional degree (M.Arch). The M.Arch. program has the goals of developing students' abilities to conceive and accurately represent environmentally sound and aesthetically fitting spaces at different scales and to provide a basis of understanding the consequences that these spaces have for their inhabitants, for society, and for the environment. The program supports critical thinking, design research, and paths towards licensure through award-winning faculty, world-class facilities, and a one-of-a-kind living laboratory (the Great Basin, Mojave Desert, Las Vegas, The Strip, and some of Earth's most engaging environments). The program serves its students, the profession, the state, and a diverse global community with studies focused on the built environment of a sustainable future.

Accreditation:

In the United States, most registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit professional degree programs in architecture offered by institutions

with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year, three year, or two-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may require a preprofessional undergraduate degree in architecture for admission. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

The University of Nevada, Las Vegas, School of Architecture, offers the following NAAB-accredited degree programs:

M.Arch. (pre-professional degree + 48 graduate credits)

M.Arch. (non-preprofessional degree + 48-96 graduate credits)

Next accreditation visit for all programs: 2025

1. Is this description correct? If not, what needs to be changed?

This description is correct.

II. Centrality to Mission

A. Department/Program Mission

What is the program's mission statement (or the department's if the program does not have one)?

The School of Architecture's Mission:

The SoA is an outward-looking school that values its diversity and cutting-edge explorations, and allows for a wide range of design approaches; a contemporary school that is highly engaged with industry, governmental and community; a school where principles of sustainability are embedded in all of our concerns, course, studios, and activities; and a vibrant school that is anchored in the unique locality of the Southern Nevada region.

We offer a transformative experience, generating meaningful knowledge and stimulating discovery through creative thinking and practice.

Our Core Values:

Integrity – To make informed decisions and act ethically and with fairness.

Respect – To listen and act professionally with courtesy and consideration of others.

Collaboration – To work together to advance creativity and innovation across disciplines.

Innovation – To be dedicated to discovery and communication of breakthrough and new ideas.

Sustainability – To prepare the next generation to lead our society toward a more sustainable future.

B. Department/Program Mission Alignment

Briefly describe how this program is aligned to the mission of the University as described in the most recent mission statement, UNLV Mission <https://www.unlv.edu/top-tier/vision>, and how it supports achievement of the institution's mission:

UNLV's Top Tier Mission statement speaks of promoting and improving the education, research, scholarship, and creative activities of our students and faculty, as well as stimulating economic development, fostering innovation, and enriching the cultural vitality of our community. Our teaching, research, and service in the Master of Architecture degree program is closely aligned with this mission.

Our SoA (School of Architecture) graduate faculty and Master of Architecture students organize our innovative research and creative activities into seven theme-based labs which define our priority research concentrations. These are the key areas of our research excellence, with groups and networks supporting the Labs:

Aging + Healthcare Design Lab; Theme: City Well-being

- This is a joint lab, coordinated by Dr. Dak Kopec in the SoA, and partnered with UNLV's School of Allied Health Sciences, School of Community Health Sciences, The College of Education, and the College of Medicine.

Natural Energies Advanced Technologies (NEAT) Lab; Theme: City Analytics

- Coordinated by Alfredo Fernandez-Gonzalez.

atLAS Lab of Advanced Design Technologies; Theme: City Visualization

- This is a joint lab, coordinated by Joshua Vermillion, and partnered with the Department of Art, the Department of Anthropology, and The Greenspun College of Urban Affairs.

Urban Futures Lab; Theme: City Futures

- This is a joint lab, coordinated by Dr. Steffen Lehmann and Samantha Solano, and partnered with the College of Engineering and the College of Urban Affairs.

Design + Build Lab; Theme: City Making

- Coordinated by Eric Weber with multiple industry partners.

Hospitality Design Lab; Theme: City Activation

- Joint lab, coordinated by Glenn Nowak, and partnered with the College of Hospitality, the International Gaming Institute, and the Entertainment Engineering and Design program.

Downtown Design Center (DDC); Theme: City Change

- Formerly coordinated by Steven Clarke (Prof. Clarke is leaving the university on June 2019) with multiple community partners. The name “Downtown Design Center” will be changed to the “City Change Research Group.”

Our graduate architecture program has a history of leading multi-disciplinary projects that blend active learning experiences for our students with innovative research and the production of scholarship, for example:

Our graduate faculty and Master of Architecture students have participated and led significantly in UNLV’s multi-disciplinary U.S. Department of Energy Solar Decathlon Competition projects, primarily through our Design+Build research + learning laboratory. UNLV has participated in the Solar Decathlon in 2013 and 2017, as well as, in the upcoming 2020 competition. The SoA-led 2013 UNLV Solar Decathlon House (DesertSol, PI: Eric Weber), was the top-ranked U.S. entry and 2nd overall in that year’s competition (http://www.solardecathlon.gov/past/2013/final_results.html), generated international publicity and allowed UNLV to engage its local community in a very meaningful way by permanently displaying DesertSol at the Las Vegas Springs Preserve.

Similarly, the 2014 and 2015 U.S. DOE Race to Zero Student Housing Competition entries were led by School of Architecture faculty and Master of Architecture students with collaboration from the Howard R. Hughes College of Engineering. The 2015 competition entry (Desert Sunrise), a service learning project that focused on the housing needs of the Moapa Band of Southern Paiutes, received a Design Excellence Award from the U.S. DOE and was featured by former President Len Jessup at the 8th National Clean Energy Summit (<http://www.cleanenergysummit.org/event-information/agenda>) and during his State of the University Address. The complexity of these projects also reinforces the program’s relationship with the local design community and the allied disciplines’ connection back to the institution at large.

Another example of our Master of Architecture program’s alignment to UNLV’s mission is the Las Vegas West-Side master planning and urban design project conducted through the SoA’s Downtown Design Center. This City of Las Vegas-sponsored, community-based project provided an opportunity for Master of Architecture students and faculty to directly engage a community within Las Vegas in the planning and design of their neighborhood—this was a way to directly impact and improvement our community with a ‘learning by doing’ model.

Because of activities/programs like those described above, UNLV has recognized the many benefits of our Master of Architecture program by highlighting outstanding architecture student achievement at commencement ceremonies, inviting faculty to speak at orientation and welcome programs such as UNLV Creates, or inviting faculty to serve on institution-wide planning initiatives, and otherwise shining a spotlight on the program through awards and media coverage in UNLV Magazine.

C. Core Themes

Briefly describe how this program supports UNLV's Core Themes (the core themes can be found at: <https://www.unlv.edu/provost/nwccu/core-themes>):

The 2017 UNLV Pathway/Core Themes have been identified as follows:

- Pathway Goal/Core Theme 1 – Advance Student Achievement
- Pathway Goal/Core Theme 2 – Promote Research, Scholarship, Creative Activity Excellence
- Pathway Goal/Core Theme 3 – Create an Academic Health Center
- Pathway Goal/Core Theme 4 – Foster Community Partnerships

Items B. and C. ask very similar questions. It is our contention that the Master of Architecture degree program greatly contributes to the support of Core Themes one (1), two (2), and four (4) based on our answer for item B.

D. Excellence

List and briefly describe five highlights or areas of excellence of the program:

The Master of Architecture program has five areas of excellence:

Hospitality Design

- Partnerships with Hospitality College and International Gaming Institute
- Multiple design competition awards and citations by Master of Architecture students (Radical Innovation awards, for example).
- Professional student projects in partnership with local professional, industry, and community partners.

Landscape Urbanism + Community-based projects

- Hyperloop Graduate Design Studio in Fall 2018.
- The HUNDRED Plan for the Historic Westside Community in Las Vegas.
- On-going work with the Springs Preserve in Las Vegas.

Sustainable Design

- The 2014 and 2015 U.S. DoE Race to Zero Student Housing Competition entries (in collaboration with College of Engineering)
- Service-learning projects with the local Moapa community
- Design excellence award from the U.S. Department of Energy

Design + Build

- U.S. DoE 2020 Solar Decathlon Project is leading to significant fund-raising and publicity.
- Past Solar Decathlon Projects including a 2nd place overall finish in 2013.
- Sand Harbor Box Office; Built project at Lake Tahoe for the Nevada Division of State Parks.
- Mesa Artist Retreat; Project at Springdale, Utah for art foundation, project is ongoing (close to completion).

Campus Planning

- Graduate design studio on campus planning and design scheduled for Fall 2019 and Spring 2020.
- On-going projects with campus facilities and planning unit dealing with wayfinding, parking, etc.

We are adding a sixth area of excellence—study-abroad Global Design Studios—in the future, with a pilot study-abroad studio in Mexico City scheduled for Summer 2019.

III. External Demand for Program

A. Stakeholders

1. Who are the main local and regional stakeholders of your educational programs, i.e., employers and entities benefiting from these programs, hiring the graduates, or admitting them to graduate and/or professional programs?

As a professional program, the Master of Architecture degree program has a number of stakeholders at the local, regional, and national levels.

The program has always enjoyed strong support from, and a close relationship to, local architectural practitioners, the Las Vegas Chapter of the American Institute of Architects, and the professional community of allied disciplines. These are the primary employers hiring our graduates (and often times have hired our current students).

As a professionally accredited program, we are also accountable to the national accreditation and state licensing bodies for architecture. Our professional accreditation process (conducted by the National Architecture Accreditation Board, or NAAB) is extremely rigorous, requiring us to meet 11 institutional support and resources criteria as well as show tangible evidence that our students' educational outcomes demonstrate understanding and ability to apply 26 specific Student Performance Criteria or SPCs. This involves collecting, curating, and showing 2-3 years of student work (at least three examples of high- and low-pass for all assignments and projects) for all courses to a visiting team composed of representatives from the various national professional organizations (AIA, ACSA, NCARB, AIAS, etc.). After graduating with a Master of Architecture degree and completing their Architecture Experience Program (AXP), our students have to pass the Architect Registration Exams (ARE) to become practicing architects. Our curriculum is carefully setup to cover all NAAB SPCs and prepare our graduates to complete the AXP program and pass the ARE exams.

2. What are specific stakeholder needs for graduates?

As the Master of Architecture is a professional program (and among the most critical components of one's path to licensure), stakeholder needs involve the professional preparation of our graduates are outlined as specific Student Performance Criteria (SPCs) by our professional accreditation body, NAAB. These SPCs cover a range of professional topics and proficiencies organized under four main areas:

Critical Thinking and Representation: Graduates from NAAB-accredited programs must be able to build abstract relationships and understand the impact of ideas based on the study and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. Graduates must also be able to use a diverse range of skills to think about and convey architectural ideas, including writing, investigating, speaking, drawing, and modeling. Student learning aspirations for this realm include:

- Being broadly educated.
- Valuing lifelong inquisitiveness.
- Communicating graphically in a range of media.
- Assessing evidence.
- Comprehending people, place, and context.
- Recognizing the disparate needs of client, community, and society.

Building Practices, Technical Skills, and Knowledge: Graduates from NAAB-accredited programs must be able to comprehend the technical aspects of design, systems, and materials and be able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment must be well considered.

Student learning aspirations for this realm include:

- Creating building designs with well-integrated systems.
- Comprehending constructability.
- Integrating the principles of environmental stewardship.
- Conveying technical information accurately.

Integrated Architectural Solutions: Graduates from NAAB-accredited programs must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution.

Student learning aspirations for this realm include:

- Comprehending the importance of research pursuits to inform the design process.
- Evaluating options and reconciling the implications of design decisions across systems and scales.
- Synthesizing variables from diverse and complex systems into an integrated architectural solution.
- Responding to environmental stewardship goals across multiple systems for an integrated solution.

Professional Practice: Graduates from NAAB-accredited programs must understand business principles for the practice of architecture, including management, advocacy, and the need to act legally, ethically, and critically for the good of the client, society, and the public.

Student learning aspirations for this realm include:

- Comprehending the business of architecture and construction.
- Discerning the valuable roles and key players in related disciplines.
- Understanding a professional code of ethics, as well as legal and professional responsibilities.

These criteria encompass two levels of accomplishment: “Understanding”—The capacity to classify, compare, summarize, explain, and/or interpret information; and “Ability”—Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately

applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.

As well, our program must describe how it is responsive to the following perspective or forces that impact the education and development of professional architects:

Collaboration and Leadership: The program must describe its culture for successful individual and team dynamics, collaborative experiences and opportunities for leadership roles.

Design: The program must describe its approach to developing graduates with an understanding of design as a multidimensional process involving problem resolution and the discovery of new opportunities that will create value.

Professional Opportunity: The program must describe its approach for educating students on the breadth of professional opportunities and career paths, including the transition to internship and licensure.

Stewardship of the Environment: The program must describe its approach to developing graduates who are prepared to both understand and take responsibility for stewardship of the environment and natural resources.

Community and Social Responsibility: The program must describe its approach to developing graduates who are prepared to be active, engaged citizens able to understand what it means to be professional members of society and to act ethically on that understanding.

B. Needs for Graduates and Future Plans

1. What are the anticipated needs for program graduates over the next 3-5 years? Please cite sources of information.

Las Vegas is among the most rapidly growing cities in the US, and the growth in certain key areas: healthcare, technology, hospitality, and entertainment (not to mention housing) offer indications of greater need to address overlaps between those areas and architecture. Preparing students to effectively contribute in those areas needs an educational framework that is informed by the profession and anticipates necessities to expand in order to meet demand. "According to an American Institute of Architecture (AIA firm leader survey conducted in late-2017, almost 80 percent of architecture firms felt that over the next few years there would be shortages of architecture staff to meet the needs of firms in their area." http://www.architectmagazine.com/aia-architect/aiafeature/how-many-architects-does-our-economy-need_o

2. What changes to the program will those require?

Our program needs to grow in order to prepare more professional architects. While growing, we will continue to self-assess our program for continuous improvement and to ensure the relevance of our curriculum. As part of this on-going process of improving, we recently re-defined our areas of excellence to better address present and future trends in the profession such as urbanization, sustainable/carbon-neutral practices, etc., to go along with our longtime concentrations in hospitality design, design-build, and community-based projects.

C. Success of Graduates

1. What steps does the department take to facilitate the success of graduates (e.g., internships, career fairs, employment talks, etc.)?

Internships are a valued component of our undergraduate programs. In recent years, architectural internships have aligned with national Architecture Experience Program (AXP) standards. By having our M. Arch students establish records and report experiences to the National Council of Architectural Registration Boards (NCARB), we are in alignment with national protocol. During the Master of Architecture program, students are required, by the School's licensing advisor, to create an NCARB account and seek internship opportunities commensurate with their experience as part of a 0-credit course.

Internships introduce students to the second "E" of the "education, experience, examination" path toward professional architecture licensure. With employment prospects in the architecture industry steadily returning to pre-recession era numbers, more students are finding more opportunities to engage in internship experiences. At the 2016 NCARB Architecture Licensing Advisor Summit the School of Architecture at UNLV learned that Nevada is ahead of the national average on engagement and completion of IDP/AXP (Architectural Experience Program). Nevada will continue to improve in this area as the Education and State Coordinators have begun planning additional AXP outreach programs.

A School of Architecture Internship Job Fair supports the placement/employment of graduates. Now approaching its eighth year of bringing prospective graduates and employers together, the UNLV SoA internship fair has served hundreds of interns and dozens of local design firms. Most M. Arch graduates enjoy temporary placement as a means of satisfying undergraduate Clinical Internship requirements. Placements are not formally made but rather fostered through the internship fair.

In addition to the endeavors mentioned above, students also engage professional colleagues through joint event programming with the American Institute of Architects and allied disciplines and organizations. In the academic and professional opportunities described above, students are exposed to, and have to negotiate, the complexities of criteria from different fields and establish protocols for effectively working together.

2. Discuss the placements of recent graduates:

The School of Architecture does not have a formal mechanism to track employment placement after graduation. Anecdotally, however, our graduates easily find careers in architecture or related fields and take roles in the local professional organization, AIA, and in fact, most are working in architecture offices during their time in school.

3. If the department or program does not have placement information on graduates, what is the plan to implement gathering that information?

Following graduation, the program does not continuously gather information on placements/employments. However, the Architect Licensing Advisor for the program has initiated a regular practice of communicating with the Nevada State Board of Architecture, Interior Design and Residential Designers (NSBAIDRD) for names of alumni earning their initial licensure. Following the bi-monthly licensure swearing-in ceremony, graduates receive a UNLV pin commemorating their

achievement. Connections between students' internship activities, which adhere to NCARB AXP guidelines, and our alumni's continued record maintenance with NCARB make data collection on graduates of the M. Arch Program easier insofar as the program provides information on alumni pass-rates on the Architecture Registration Examination on its program website as required by NAAB (National Architecture Accrediting Board).

4. Do placements match stakeholder needs as identified above in A of this section?

Yes, and we benefit from a very productive relationship with our stakeholders in multiple ways. While we don't have a mechanism to formally track graduate employment placement, enough of our graduates are gainfully employed locally in architecture firms (and taking leadership positions at these companies) to understand our value to the local and regional professional community. The profession reciprocates with constant engagement with our School of Architecture through programs with the American Institute of Architects (AIA) and the American Institute of Architecture Students (AIAS), through gifts and scholarships to our school and students, as well as attending lectures and joint events. Our alignment with professional stakeholders is a point of pride for our School, its students and faculty.

5. If not, please explain:

N/A

6. Does the program assess whether the graduates are meeting employer's needs?

Yes, this program assesses whether our graduates are meeting employer's needs in several ways. Since we enjoy a great relationship with the local architecture profession within the Las Vegas area, we continuously have the profession engage with our students and assess their work and preparedness in several ways:

- We invite professionals to review student design projects at the end of each semester;
- Our student organization (AIAS) sets up a mentoring program for our students with local professionals as well as firm visits and job shadowing;
- Our students are required to complete a 600-level clinical internship which typically involves working as a paid intern-architect within an architecture firm;
- Local practitioners are invited to participate in the preparation of the Architecture Program Report for professional (NAAB) accreditation and to review the collected student work for meeting our accreditation SPCs (Student Performance Criteria).

7. If not, what will the program do to place this NSHE-required assessment in place and by what date?

In addition to the assessment of students' Clinical Internships through a national standard metric (NCARB AXP Experience Reporting), the Architecture Licensing Advisor will continue to look for additional ways to add assessment opportunities to the AAD 600 zero-credit internship course.

8. Additional comments:

N/A

IV. Program Resources

A. Faculty Time

1. Faculty and GA Resources

| | Fall 2015 | Spring 2016 | Fall 2016 | Spring 2017 | Fall 2017 | Spring 2018 |
|------------------------------------|-----------|-------------|-----------|-------------|-----------|-------------|
| Number of Full Time Faculty | 15 | 13 | 13 | 14 | 16 | 17 |
| Number of State-Supported GA lines | 10 | 10 | 10 | 10 | 10 | 10 |
| Number of PTIs | 10 | 13 | 8 | 14 | 10 | 10 |
| Number of FIRS & Visiting Faculty | 2 | 2 | 1 | 1 | 1 | 2 |

| | Fall 2015 | Spring 2016 | Fall 2016 | Spring 2017 | Fall 2017 | Spring 2018 |
|---|-----------|-------------|-----------|-------------|-----------|-------------|
| Percent of Classes Taught by Full Time Faculty | 100 | 89 | 88 | 78 | 88 | 78 |
| Percent of Classes Taught by Number of State-Supported GA lines | 0 | 0 | 0 | 0 | 0 | 0 |
| Percent of Classes Taught by Number of PTIs | 0 | 11 | 12 | 22 | 12 | 22 |
| Percent of Classes Taught by Number of FIRS & Visiting Faculty | 0 | 0 | 0 | 0 | 0 | 0 |

| | Fall 2015 | Spring 2016 | Fall 2016 | Spring 2017 | Fall 2017 | Spring 2018 |
|---|-----------|-------------|-----------|-------------|-----------|-------------|
| Student Credit Hours Taught by Full Time Faculty | 51 | 48 | 45 | 42 | 45 | 42 |
| Student Credit Hours Taught by Number of State-Supported GA lines | 0 | 0 | 0 | 0 | 0 | 0 |
| Student Credit Hours Taught by Number of PTIs | 0 | 6 | 6 | 12 | 6 | 12 |
| Student Credit Hours Taught by Number of FIRS & Visiting Faculty | 0 | 0 | 0 | 0 | 0 | 0 |

2. For other non-major courses – e.g., upper division for the college or university, estimate the unit's resources allocated to them:

N/A

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B. Budget

1. Please fill in the table with three years of financial expenditures to be used to respond to questions 2 and 3 below.

| Budget category | FY 15–16 | FY 16–17 | FY 17–18 |
|---|-----------------------|-----------------------|-----------------------|
| State Operating (2101) | \$1,881,377 | \$2,043,280 | \$2,280,711 |
| Student Fees | \$1,078,056 | \$958,953 | \$451,538.80 |
| Indirect Cost Recovery | \$0 | \$6673.72 | \$3,272.75 |
| Self-supporting | \$129,905.50 | \$165,656.55 | \$29,922.13 |
| Total Allocations | \$3,089,338.50 | \$2,216,569.22 | \$2,765,444.68 |
| Number of Graduate Assistantships (including GAs on grants) | 15 | 15 | 15 |

2. Are these resources sufficient to meet the degree program’s instructional and scholarship needs?

Currently, yes. However further growth in our programs will require additional resources.

3. If not, approximately what line items and amounts would be needed?

N/A

C. General Education

1. If your program or unit offers General Education courses, please estimate what portion of the unit’s resources are allocated to this area:

N/A

2. Does the combined load from A and B above affect your unit’s ability to offer courses for its major? If so, please describe:

No.

D. Other Funding and Resources

1. Is funding from other sources sufficient to assist the program in achieving its outcomes? Other sources to be considered include: differential tuition, grants and contracts, endowment income, and one-time gifts for student scholarships, other one-time gifts.

School of architecture funding comes from five different sources: state general fund; differential tuition; endowment income; scholarship gift accounts, and sponsored projects. With the exception of sponsored projects, which are managed directly by their Principal Investigators, all other funding sources are managed by the School of Architecture Director.

2. If not, which funding streams could most reasonably be increased to help the program attain its outcomes?

The UNLV School of Architecture is currently in a period of transition, with respect to its leadership. The school has spent the last two and a half years under the supervision of an interim director. A new

director, Dr. Steffen Lehmann, joined the school of architecture on October 1, 2018. It would be premature to suggest whether or not, or which, funding streams could be increased as the SoA's new leadership may have an implementation strategy different from what we have been used to.

3. Has any new donor revenue been generated since the last program review?

As mentioned above the school of architecture manages endowment Income. The purpose of this account is to supplement expenses not covered by the State General Fund and to supplement support for faculty and student travel. This account is funded twice a year, at the beginning of the fall and spring semesters. The average appropriation each fiscal year is \$44,500.00.

Another source of funding to the School of Architecture are gifts and donations, however these are restricted by the donors' intent. For example, John Klai II funds the Klai+Juba+Wald Lecture Series in the amount of \$15,000-\$25,000 per year. Similarly, Tom Schuman gave to the School of Architecture \$50,000 over the past five years to fund student travel, David Howryla provided \$125,000 to support the creation of the David G. Howryla Design Build Lab, and the Las Vegas Chapter of the AIA provides \$11,000 for student scholarships every year.

Scholarship, Fellowship and Grant Funds

The school of architecture receives a number of scholarships that support student achievement:

- The School of Architecture General Scholarship is awarded annually in the amount of \$4,000 to a meritorious student enrolled in the B.S. in Architecture Program.
- The Michal Alcorn Memorial Scholarship was created to celebrate the life and contributions of Professor Michael Alcorn, who was the school's first director, and a faculty member of the School of Architecture between 1993 and 2010. The recipient of this scholarship must be an architecture major who demonstrates excellence in graphic communication and representation. \$13,000.00 were awarded during the last two fiscal years.
- The Bob Genzer APA Scholarship is awarded to 3rd or 4th year architecture students doing urban design projects. \$2000.00 were awarded in the last two fiscal years.
- The Commercial Roofers Incorporated Scholarship has been awarded since 2007. Every year, \$1,500.00 are awarded to the most meritorious student in the ABS 322/522 class.
- The Leslie Sully Scholarship is awarded every year to a landscape architecture student having a cumulative GPA of 3.0 or higher. \$2,000.00 were awarded during the last two fiscal years.

American Institute of Architects (AIA) Scholarships:

The Las Vegas Chapter of AIA administers several scholarships on behalf of its members. The beneficiaries of these scholarships are UNLV School of Architecture students. These scholarships are awarded at a recognition ceremony in the School of Architecture and the financial awards are processed in most cases by the school's administrative staff. A list of the AIA Scholarships, award criteria, and dollar amount given to the students is included below (scholarships given to M.Arch. program students highlighted in yellow):

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| Scholarship: | Criterion: | Amount: |
|---|----------------------------------|----------------|
| Felicia Friedlander Scholarship | Entering 3rd year in fall | \$1,000.00 |
| AIA Las Vegas Scholarship | Entering 4th year in fall | \$1,500.00 |
| Ric Licata, FAIA Memorial Scholarship | Entering 4th year in fall | \$1,500.00 |
| Carpenter Sellers DelGatto Travel Award | Any student 2nd through 6th year | \$1,500.00 |
| William Snyder Honorary Scholarship | Entering 4th year in fall | \$1,000.00 |
| SHarchitecture Scholarship | Entering 4th year in fall | \$2,000.00 |
| John R. Klai, II, FAIA Honorary Scholarship | Entering 5th Year in Fall | \$2,500.00 |

4. Has the unit engaged in fundraising activities to support the program over the last 5 years? If no, please explain why not:

Yes, the unit has engaged in fundraising activities to support the program. Seed gifts of \$25,000 by Marnell Architecture and \$1,000 by John P. Copoulos were received and deposited on April 4, 2018 to establish and name the AIA Las Vegas Chapter Fund. The purpose of the Fund is to provide financial support for the School of Architecture's academic and educational programmatic needs, multi-purpose and special project needs, training and research support, materials and other related expenses for faculty, students and staff as approved by the Director, School of Architecture. More recently, Tom Schuman gave \$10,000 and David Howryla along with Marnell Companies gave \$35,000 to help fund initiatives for students as well as faculty research. Currently, a number of discussions are ongoing about significant gifts to be donated to the School of Architecture in 2019.

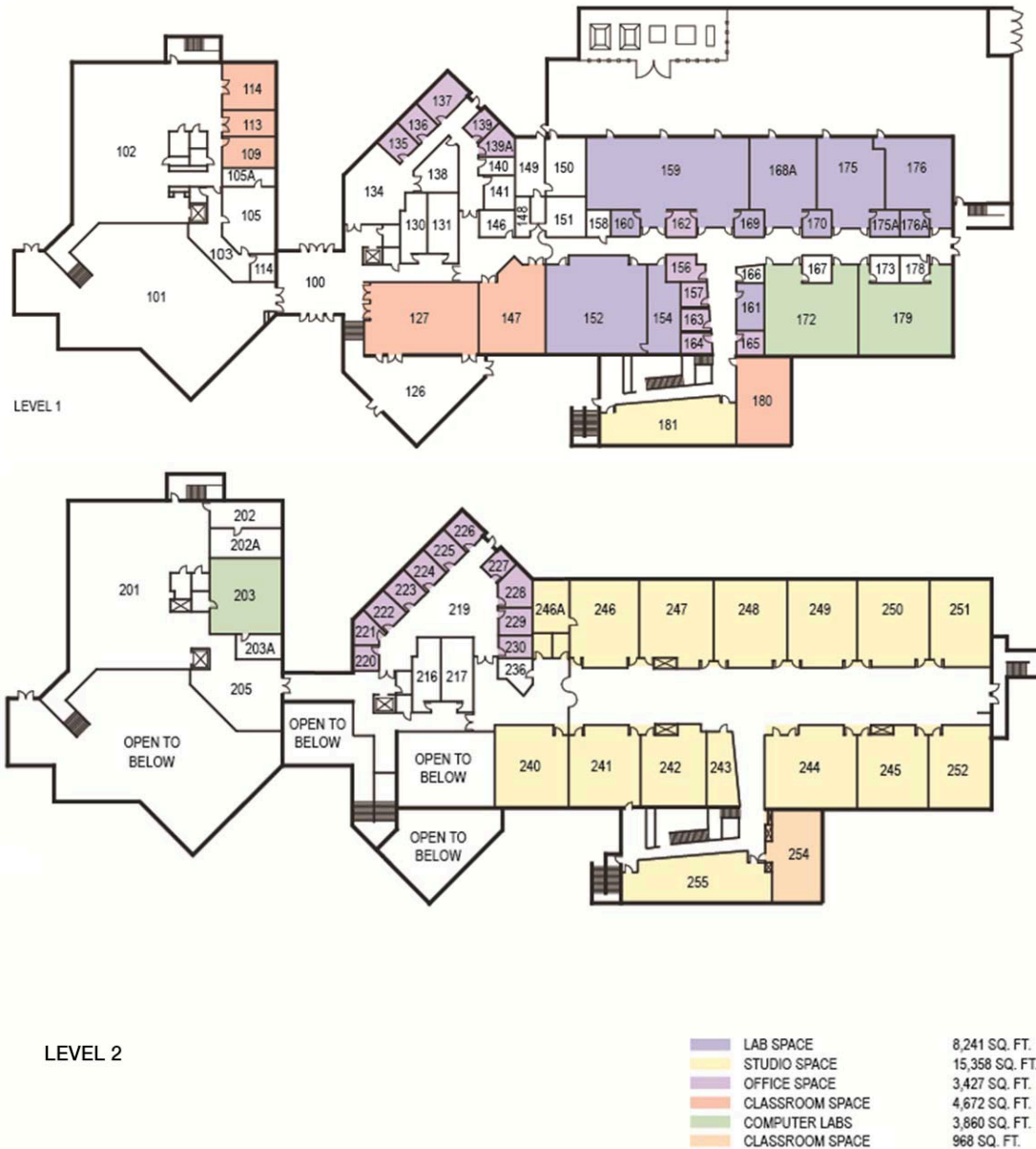
5. What has been the result of these fundraising activities?

As noted above, the external funds raised by the school of architecture support student scholarships, student travel, events, pedagogical initiatives, as well as research initiatives.

6. Review the space data for your department and comment on its amount and quality. These data will need to be accessed by an individual with Archibus® access.

The School of Architecture Building (ARC), a 76,000 square feet facility, has been the home of the School of Architecture since 1997. The floor plans included below highlight designated space uses for those rooms allocated to instruction and/or program support.

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The ARC Building is located on the south end of the UNLV campus, on Brussels Street and Tropicana Avenue. Designed by Las Vegas architects Swisher-Hall, the ARC Building is programmatically organized in two distinct wings. The North Wing houses the two-story Architecture Studies Library (ASL). The South Wing of the building houses all the classrooms, administrative and faculty offices, and the computer, research, and fabrication labs. The central node linking the north and south sides of the ARC Building is a large, two-story lobby. The building’s lobby facilitates public interaction and accommodates receptions and school events. During 2004, a 7,000 square foot expansion containing graduate studios, a classroom, and critique space was constructed on the west side of the original building.

Summary of Space Allocation

ARC 100 –Architecture Building Lobby - Reception Space

This space, located right next to the building's main access, serves as a gathering area during lectures, exhibitions, or other school events. The space is also used as a gallery, displaying large physical models produced by students (this photo shows on the lower level a wall-section mockup from the 2013 Solar Decathlon and a sponsored-project site model). Adjacent to the lobby, there is an information board and a display monitor providing information about School of Architecture news and events.

ARC 127 – Lecture Hall - Multipurpose Room

ARC 127 can be accessed directly from the ARC Building lobby. This classroom, the largest in the School of Architecture, is characterized by its two-story space with moveable tiered auditorium seating for 130 students. ARC 127 is a lecture hall equipped with sound, computer, and audio-visual equipment. When the tiered seating is collapsed the room becomes a 1,500 square-foot multi-purpose space that is used for receptions and year-end events. Located immediately outside this classroom is a walled garden used for outdoor receptions and school social events.

ARC 147 – Smart Classroom

This smart classroom can accommodate 48 students at one time. Furnishings are moveable allowing the room to be used for course instruction as well as workshops and conferences.

ARC 152 – Smart Classroom

This classroom is designed for laptop instruction and equipped with state-of-the-art audio visual, video conferencing, and interactive instructional capabilities. This classroom can accommodate 48 students at one time. Furnishings are moveable allowing the room to be used for course instruction as well as workshops and conferences.

ARC 154 – Building Structures Lab

The Building Structures Laboratory supports the important facet of the demonstrative and experimental components of building science courses. The main objective of this laboratory is to complement the sequence of two structures courses currently taught in the architecture curriculum by introducing students to illustrative experiments on the behavior and characteristics of traditional as well as innovative construction materials, structural components, and simple structural systems. The laboratory additionally provides tools for graduate students pursuing research interests in the areas of construction technologies and structural systems. In order to achieve these objectives, the lab is equipped with a 55-kip (244-kN) static testing machine, a data acquisition system, strain gauges, extensometer, a steel reaction frame with a 25-kip (111kN) capacity manual hydraulic ram, and miscellaneous laboratory tools. The lab testing equipment is housed in ARC 175.

ARC 157 – Photo Lab

The Photography Studio is approximately 160 square feet. It provides students and faculty lighting, stands and props, filters, other equipment to photograph and document models and drawings.

ARC 159 + 175 – Fabrication Workshop

The 1,800 square feet model shop has traditional woodworking equipment, metal working equipment, digital fabrication tools, a supervisor's office, model storage space, and access to a large outdoor building/construction yard. This space is equipped with saws, planers, sanders, metal working equipment (arc welders, soldering equipment), as well as hot wire for foam and cardboard. A CNC

laser cutter enables students to use their CAD drawings as model templates for cutting wood, plastic, cardboard. Newer equipment includes a 5' x 10' bed, 3-axis, CNC milling machine as well as a 32" x 18" bed laser cutter, and two small 3D printers. This side of the workshop/lab has direct access to the ARC Building Yard.

ARC 168A – David G. Howryla Design Build Lab

The David G. Howryla Design Build Lab provides manual and automated tools for working with steel and other metals. The facility houses a drill press, wet saw, a break, a shear, and welding equipment. Along with these traditional tools, the shop also has a CNC plasma cutter for cutting custom or complex shapes. The room is outfitted and approved for "hot work" with eye protection and fire proofing. This laboratory is adjacent to the fabrication shop and also enjoys direct access to the ARC Building Yard.

ARC 172 and 179 Computer Labs

These two computer labs are located on the first floor in the south end of the building. They both are equipped with 24 workstations and a teaching station. Rooms 172 and 179 are managed by the Office of Information Technology.

ARC Building Construction Yard

The ARC Building Yard is an outdoor area adjacent to the Fabrication Workshops, David G. Howryla Design Build Lab, and NEAT Lab accessible via 8' x 10' overhead doors along the east façade of the ARC Building. The yard is a large, walled outdoor work area located along the east end of the building and accessed for outside deliveries from a south-facing gate. The work yard is available for use for large construction and research projects.

ARC 176 – Natural Energies Advanced Technologies (NEAT) Lab

The NEAT Laboratory consists of both outdoor and indoor facilities to conduct its research and pursue its mission. The outdoor test area, located in the ARC Building Yard, houses prototypes to investigate the performance of green roofs, roofponds, and thermal insulation materials. The outdoor test area also has a complete outdoor weather station. The laboratory's indoor facilities include the main laboratory space and a small office. The main laboratory space consists of three separate areas: classroom space (capacity 1 students), Heliodon (sun simulator) featuring digital video-recording capabilities; and graduate student workstations (3 desks each with a computer).

ARC 180 – Smart Classroom

This smart classroom can accommodate 48 students at one time. Furnishings are moveable allowing the room to be used for course instruction as well as workshops and conferences.

ARC 181 (and ARC 255) – Architecture Graduate Studios

Two graduate studios are located in the building addition to the west side of the building. Each studio has an approximate area of 1,000 square feet and both open directly into a two-story critique space.

ARC 220 – Slide Library

An image library of 120 square feet is located adjacent to the faculty offices in the faculty common area on the second floor. This facility houses the school's slide collection (approximately 13,000 slides). The School of Architecture is in the process of digitizing its image collection; approximately 6,000 images are now included in a searchable database which will soon be available to all faculty on the

school's server. The image library contains both a slide and a flat-bed scanner that are available to the faculty.

Offices

On the second floor of the ARC Building is an area dedicated to faculty offices. Eleven private faculty offices for full-time faculty, averaging 180 square feet each, surround an open conference area used as a work space and for faculty/student meetings. Four additional faculty offices, averaging 150 square feet, are located along the ground floor corridor to the graduate studio addition. Administrative offices for the School of Architecture are located on the first floor next to the lobby. This office suite includes the Director's office, a conference room, four offices currently occupied by faculty and classified staff, a workroom for staff and student workers, a kitchen, mail boxes, and a storage room.

Architecture Studies Library (ASL)

The Architecture Studies Library (ASL), organized in two-levels, can be accessed directly from the ARC Building lobby. The ASL provides access to resources and information about the professional fields of architecture, building and construction, urban planning, landscape architecture and interior design in support of the academic needs of the School of Architecture. With an area of 16,000 square feet, the ASL houses a collection of 25,000+ bound volumes, 600+ media items, and 240 journal titles. The ASL also features a computer lab/classroom, several group study rooms, and a gallery that serves as exhibition and meeting space.

School of Architecture Design Studios

Undergraduate studios for all the programs housed in the School of Architecture are located on the second floor of the ARC Building. Just over 20,000 square feet of loft-type space has been divided into three interconnected areas. The two studio spaces, with 7,252 and 9,102 square feet, contain approximately 200 workstations. Studios are equipped with outlets and a robust wireless network that allow students to access the internet as well as peripherals such as printers, plotters, and smart screens.

ARC 2nd -Floor Gallery

Located between the two undergraduate studio spaces is a 6,096 square feet sky-lit critique space. The ARC 2nd -Floor Gallery is equipped with pin-up space as well as 4 smart screens which are used for announcements, exhibits, presentations and project critiques. The ARC 2nd Floor Gallery is a flexible, multi-use space used for circulation and available for juries, all-school meetings, group projects, spontaneous events, and design charrettes.

ARC Gallery II

The two-story critique space outside of the graduate studios features pin-up space, seating areas, and a new nine-screen digital display with a touch-screen monitor.

Space for Faculty Teaching, Scholarship, Service, and Advising

The School of Architecture provides faculty with the space needed to fulfill their various roles. Individual offices provide full-time faculty with secure space for work, with adequate storage for personal and student projects and documents, and with furniture to allow for private meetings on campus. All faculty members are also provided with a computer on a three-year upgrade cycle. Studios and classrooms throughout the School of Architecture are well-equipped with appropriate infrastructure and technology as well as new furniture to foster a 21st century learning environment.

Two conference rooms (one private and the other one in a shared faculty area) offer opportunities for collaboration with other faculty and students.

UNLV Downtown Design Center (Off-campus Location)

In addition to the ARC Building on the UNLV Campus, the School of Architecture maintains a vibrant Downtown Design Center (DDC). The DDC leases approximately 5,200 square feet of space in the renovated Fifth Street School, a 1936 Spanish Mission Style grammar school in Downtown Las Vegas. UNLV's space at the Fifth Street School consists of two dedicated studio spaces accommodating 12-15 design students each, one conference/seminar room holding approximately 25 people, and one office suite for a staff of up to five. The Fifth Street School's gymnasium has been converted into a 300-seat auditorium, and the locker rooms have been reconfigured as a gallery space. Both the auditorium, and the gallery, are shared by all four tenants at the Fifth Street School, and host a variety of public events in Downtown Las Vegas.

In May 2019, the DDC will be renamed and move to new premises.

7. Is the quality and quantity of available consumable materials and supplies (e.g., office supplies or lab supplies) adequate and if not, explain why not:

Yes, the quality and quantity of available consumable materials and supplies is adequate.

8. Is the quality and quantity of available technology resources, such as computers adequate and if not, explain why not:

The school of architecture's technology committee has indicated that the school requires significant classroom upgrades, in so far as to improve the quality of available technology resources in three of the classrooms in the ARC building. Those rooms are ARC 152, ARC 180, and ARC 147 (listed in order of priority). The upgrades are necessary in that the current technology available in each of these rooms is outdated and does not serve in the full capacity expected in a Smart Classroom.

9. Is the quality and quantity of available equipment (other than computing) adequate and if not, explain why not:

Yes, the quality and quantity of available equipment other than computing is adequate as long as there are regular update cycles for replacement.

10. Is the quality and quantity of available library and information resources adequate and if not, explain why not:

The quality and quantity of available library resources is more than adequate. The UNLV School of Architecture is fortunate in that the UNLV Architecture Studies Library (ASL) is housed within the Architecture building. The Architecture Studies Library provides access to resources and information about the professional fields of architecture, landscape architecture, interior design, urban planning, and building and construction. Located in the Architecture Building (ARC), the facility opened in 1997 and contains 16,000 square feet organized on two levels.

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The ASL features two gallery spaces that are frequently used by the School of Architecture community to display student work and/or faculty/professional exhibits, a computer lab/classroom, three group study rooms, and light tables and scanners that augment study resources for School of Architecture students. Design software to support the academic programs of the School of Architecture is available on the ASL computer lab/classroom.

Collections: The collection contains 25,000+ bound volumes, 600+ media items, and 240 journal titles with about 175 current titles. An archive of Las Vegas AIA Design Awards preserves local architecture history.

Hours of Operation: The ASL is opened 63 hours per week when classes are in session (8:00AM – 8:00PM Monday – Thursday; 8:00AM – 6:00PM Friday; Closed Saturday; 1:00PM – 5:00PM Sunday).

Staff: The ASL staff includes one full-time staff and nine part-time student employees. The College of Fine Arts Librarian also holds office hours in the ASL twice a week: on Mondays from 10:00AM – 12:00PM, and on Wednesdays from 3:00PM – 5:00PM.

11. Staffing

a) Are available department staff resources sufficient to attain the program’s outcomes?

Currently, the SoA has two administrative support staff, while at the same time employing two part-time student workers. Addressing the necessary number of departmental staff members needed will require rigorous prioritization of responsibilities.

b) If not, what additional staff resources are needed and how would they be funded?

The school of architecture would benefit from a part, or full-time administrative staff member to facilitate sponsored projects. I.e., assisting PIs with budgeting, working with the UNLV purchasing department, managing grant-related employment contracts etc., A feasible way of paying for this staff member might be to require future PIs to include a percentage allocated to admin staff in their project proposals.

12. Additional comments:

None.

V. Size of Program

1. Below are headcount, course enrollment, and degrees conferred data from Decision Support.

| <u>Academic Level Key</u> | |
|---------------------------|------------------|
| Undergraduate (UGRD): | Graduate (GRAD): |
| 10 – Freshman | GR - Graduate |
| 20 – Sophomore | PHD – PhD |
| 30 – Junior | |
| 40 – Senior | |
| 50 – Post Bacc Undergrad | |

Headcount declared majors in Architecture MARCH

Plan code 'ARCMARCH'

| Term | Graduate |
|-------------|-----------------|
| Fall 2010 | 49 |
| Spring 2011 | 45 |
| Fall 2011 | 41 |
| Spring 2012 | 40 |
| Fall 2012 | 45 |
| Spring 2013 | 44 |
| Fall 2013 | 49 |
| Spring 2014 | 45 |
| Fall 2014 | 53 |
| Spring 2015 | 47 |
| Fall 2015 | 54 |
| Spring 2016 | 50 |
| Fall 2016 | 45 |
| Spring 2017 | 42 |
| Fall 2017 | 42 |
| Spring 2018 | 35 |
| Fall 2018 | 37 |

Source: PeopleSoft Table PS_LV_CNR_STDNT_CR
PS_LV_CNR_STDNT_CP
Office of Decision Support, December 2018

School of Architecture enrollments by course subject

Enrollments in **AAE** lecture courses by course level

| Term | Level - 500 | Level - 600 | Level - 700 |
|-------------|--------------------|--------------------|--------------------|
| Fall 2010 | 13 | 7 | 89 |
| Spring 2011 | 0 | 3 | 87 |
| Fall 2011 | 11 | 15 | 66 |
| Spring 2012 | 0 | 8 | 55 |
| Fall 2012 | 5 | 14 | 77 |
| Spring 2013 | 0 | 5 | 69 |
| Fall 2013 | 8 | 13 | 82 |
| Spring 2014 | 0 | 5 | 78 |
| Fall 2014 | 6 | 29 | 75 |
| Spring 2015 | 0 | 5 | 71 |
| Fall 2015 | 0 | 29 | 76 |
| Spring 2016 | 2 | 4 | 76 |
| Fall 2016 | 0 | 21 | 82 |
| Spring 2017 | 0 | 2 | 72 |
| Fall 2017 | 0 | 19 | 73 |
| Spring 2018 | 0 | 1 | 42 |
| Fall 2018 | 0 | 20 | 60 |

Source: PeopleSoft Table PS_LV_CNR_ENRL
Office of Decision Support, December 2018

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Enrollments in **AAD** lecture courses by course level

| Term | Level - 600 | Level - 700 |
|-------------|--------------------|--------------------|
| Fall 2010 | 1 | 1 |
| Spring 2011 | 0 | 1 |
| Fall 2011 | 0 | 1 |
| Spring 2013 | 0 | 3 |
| Fall 2013 | 0 | 8 |
| Fall 2015 | 0 | 2 |
| Fall 2016 | 0 | 1 |
| Spring 2017 | 0 | 2 |
| Fall 2017 | 0 | 1 |
| Fall 2018 | 0 | 4 |

Source: PeopleSoft Table PS_LV_CNR_ENRL
Office of Decision Support, December 2018

Enrollments in **AAI** lecture courses by course level

| Term | Level - 600 | Level - 700 |
|-------------|--------------------|--------------------|
| Spring 2011 | 3 | 0 |
| Spring 2012 | 2 | 0 |
| Spring 2013 | 2 | 0 |
| Spring 2015 | 3 | 0 |
| Spring 2016 | 4 | 0 |
| Fall 2016 | 1 | 0 |
| Spring 2017 | 9 | 2 |
| Spring 2018 | 0 | 2 |
| Fall 2018 | 1 | 0 |

Source: PeopleSoft Table PS_LV_CNR_ENRL
Office of Decision Support, December 2018

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Enrollments in **ABS** lecture courses by course level

| Term | Level - 500 | Level - 600 | Level - 700 |
|-------------|--------------------|--------------------|--------------------|
| Fall 2010 | 10 | 3 | 1 |
| Spring 2011 | 8 | 3 | 14 |
| Fall 2011 | 13 | 2 | 0 |
| Spring 2012 | 13 | 5 | 17 |
| Fall 2012 | 18 | 3 | 1 |
| Spring 2013 | 9 | 11 | 19 |
| Fall 2013 | 13 | 4 | 1 |
| Spring 2014 | 5 | 3 | 21 |
| Fall 2014 | 6 | 2 | 5 |
| Spring 2015 | 2 | 5 | 23 |
| Fall 2015 | 9 | 5 | 4 |
| Spring 2016 | 8 | 0 | 26 |
| Fall 2016 | 4 | 4 | 0 |
| Spring 2017 | 5 | 3 | 12 |
| Fall 2017 | 3 | 4 | 1 |
| Spring 2018 | 0 | 0 | 19 |
| Fall 2018 | 5 | 1 | 0 |

Source: PeopleSoft Table PS_LV_CNR_ENRL
Office of Decision Support, December 2018

Enrollments in **HID** lecture courses by course level

| Term | Level - 600 | Level - 700 |
|-------------|--------------------|--------------------|
| Fall 2016 | 1 | 3 |
| Spring 2017 | 0 | 2 |
| Fall 2017 | 1 | 2 |
| Spring 2018 | 0 | 1 |
| Fall 2018 | 0 | 5 |

Source: PeopleSoft Table PS_LV_CNR_ENRL
Office of Decision Support, December 2018

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Degrees Conferred by Academic Year

Degrees conferred by Academic Year (July to June) MARCH

Plan code 'ARCMARCH'

| Academic Year | Degree Count |
|----------------------|---------------------|
| 1992-93 | 1 |
| 1994-95 | 1 |
| 1995-96 | 1 |
| 1996-97 | 5 |
| 1997-98 | 16 |
| 1998-99 | 11 |
| 1999-00 | 22 |
| 2000-01 | 14 |
| 2001-02 | 17 |
| 2002-03 | 18 |
| 2003-04 | 14 |
| 2004-05 | 9 |
| 2005-06 | 9 |
| 2006-07 | 10 |
| 2007-08 | 12 |
| 2008-09 | 11 |
| 2009-10 | 13 |
| 2010-11 | 20 |
| 2011-12 | 14 |
| 2012-13 | 15 |
| 2013-14 | 13 |
| 2014-15 | 17 |
| 2015-16 | 21 |
| 2016-17 | 19 |
| 2017-18 | 15 |
| 2018-19 | 2 |

Source: PeopleSoft Table PS_LV_CNR_DEGREES
Office of Decision Support, December 2018

2. Discuss the headcounts from the last five years, i.e., are the trends in line with projections in your unit’s strategic plan?

Our unit (the School of Architecture) doesn’t have its own strategic plan, however, our new intentions for all of our programs, including the Master of Architecture program, is to grow larger in size. Growth is in line with our College’s strategic plan. In reviewing the preceding charts, over the last five years, we grew steadily, but then our numbers dipped a bit in 2018. Having new leadership (a new school director and a new graduate coordinator), we aren’t quite sure why the slight dip in headcount. However, we are taking measures to grow—our undergraduate BS Architecture degree program is our main pipeline for graduate applicants to our Master of Architecture degree program and we are now pro-actively recruiting these students, as well as outside students (with and without pre-architecture baccalaureate degrees) and international students. The School of Architecture also has, for the first time, comprehensive brochures and other printed marketing materials for distribution to our potential undergraduate and graduate markets.

3. If not, why not?

N/A

4. Does your program’s enrollment trend differ from national trends?

In short, no, our program’s enrollment does not differ significantly from national trends. As evidenced in the ACSA’s (Association of Collegiate Schools of Architecture) annual “Budget and Enrollment Surveys,” architecture schools are experiencing a slow growth trend, and a close look at the collected data shows significant changes in the number of applications and enrollment for a majority of the schools from year-to-year (<http://www.acsa-arch.org/resources/data-resources/budget-and-enrollment-survey>).

5. If yes, please discuss the reasons why:

N/A

6. Additional comments:

As mentioned above, we wish to grow our Master of Architecture program. We have very recently re-examined and have adjusted our curriculum at very key times over the last 3 years—before our professional accreditation visit, assessing the resulting accreditation team report, and finally just a months ago in January 2019 as a faculty in order to ensure that we are delivering a high-impact, rigorous, and competitive professional education. Additionally, we see the need to grow our pool of applicants in order to grow our matriculation numbers. We are more actively pursuing our graduating seniors in the BS Arch and other undergraduate programs in the School of Architecture. As well, we are looking for opportunities for matriculation agreements with international universities.

VI. Retention, Progression, Completion

A. Major Course Offerings

1. Are enough courses offered to meet enrollment demands?

Yes

2. How many major courses have been added or eliminated in the last 5 years?

__0__ Added __0__ Eliminated

3. Why were the actions taken?

N/A

4. After reviewing the program, what additional actions should be taken to improve retention, progression and completion?

We are currently looking at several ways to improve. One is to critically examine and revise our degree concentrations. This is leading to a very healthy discussion regarding the identity of the program along with which areas of the curriculum allow us to be nimble to change and adaptation based on emerging professional and education topics.

We are also offering a study abroad “Global Design Studio” in Mexico City this June. We see this course as a pilot for more robust summer study abroad opportunities in the future that will help to attract more student applications while also allowing our students to complete their degrees quicker (especially the 3+ track).

We are also trying to create a new full-time position: Assistant Professor of Interdisciplinary Design (tenure-track position) which will support the university’s top-tier plan and increase research-based outputs.

5. Are there any courses that students routinely have difficulty getting enrolled in, that slow progression and/or graduation? If so, please identify them:

No.

6. If last question was answered yes, what steps can be taken to reduce “bottle-necks” in these courses. Please indicate *both* financially-based and non-financially-based solutions.

N/A

7. Can any changes in sequencing of courses be made to facilitate graduations?

We are always looking for ways to improve the learning experience for our students. Our 3+ track of the Master of Architecture degree (for those without the pre-architecture bachelor degree) course plan could use some redesign and shuffling in order to shorten the length of the degree. However, no course sequence changes are being proposed at this time until this can be studied further.

B. Curriculum

1. Is the program’s curriculum aligned with current developments in the field?

As evidenced by our most recent and successful professional accreditation visit, yes, our curriculum is aligned with current developments in the field. In addition to our professional degree obligations, the School of Architecture has been addressing important and emerging themes in the field, notably, urbanization and sustainable design, the effects of climate change and net-zero building, and we have added cutting-edge digital design and fabrication equipment for our students to use.

2. If not, what needs to be done to make the curriculum current?

N/A

C. Graduation Rates

Program graduation numbers and rates are summarized below.

Degrees Conferred by Academic Year

Degrees conferred by Academic Year (July to June) MARCH

Plan code 'ARCMARCH'

| Academic Year | Degree Count |
|----------------------|---------------------|
| 1992-93 | 1 |
| 1994-95 | 1 |
| 1995-96 | 1 |
| 1996-97 | 5 |
| 1997-98 | 16 |
| 1998-99 | 11 |
| 1999-00 | 22 |
| 2000-01 | 14 |
| 2001-02 | 17 |
| 2002-03 | 18 |
| 2003-04 | 14 |
| 2004-05 | 9 |
| 2005-06 | 9 |
| 2006-07 | 10 |
| 2007-08 | 12 |
| 2008-09 | 11 |
| 2009-10 | 13 |
| 2010-11 | 20 |
| 2011-12 | 14 |
| 2012-13 | 15 |
| 2013-14 | 13 |
| 2014-15 | 17 |

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Degrees Conferred by Academic Year

Degrees conferred by Academic Year (July to June) MARCH

Plan code 'ARCMARCH'

| Academic Year | Degree Count |
|---------------|--------------|
| 2015-16 | 21 |
| 2016-17 | 19 |
| 2017-18 | 15 |
| 2018-19 | 2 |

Source: PeopleSoft Table PS_LV_CNR_DEGREES
Office of Decision Support, December 2018

Graduation rates for Fall Cohorts

New Graduate Student Cohorts declaring Architecture MARCH and graduating within 5 years

Plan code 'ARCMARCH'

| Fall | Size | Yr 2 rate (%) | Yr 3 rate (%) | Yr 4 rate (%) | Yr 5 rate (%) |
|------|------|---------------|---------------|---------------|---------------|
| 2010 | 19 | 26.3 | 36.8 | 52.6 | 63.2 |
| 2011 | 15 | 60.0 | 66.7 | 80.0 | 80.0 |
| 2012 | 19 | 52.6 | 73.7 | 89.5 | 89.5 |
| 2013 | 21 | 42.9 | 66.7 | 76.2 | 85.7 |
| 2014 | 24 | 50.0 | 58.3 | 66.7 | 66.7 |
| 2015 | 24 | 58.3 | 70.8 | 70.8 | NA |
| 2016 | 13 | 53.8 | 69.2 | NA | NA |
| 2017 | 17 | 0.0 | NA | NA | NA |
| 2018 | 15 | NA | NA | NA | NA |

Source: PeopleSoft Table PS_LV_CNR_DEGREES
PS_LV_CNR_CP
PS_LV_CNR_CR
Office of Decision Support, December 2018

**Completion rates for new students
declaring Architecture MARCH (Plan code
'ARCMARCH')
School of Architecture**

| Duration | N | Degrees | Rate |
|-----------------|----------|----------------|-------------|
| Years 2 | 152 | 66 | 43.4 |
| Years 3 | 135 | 85 | 63.0 |
| Years 4 | 122 | 88 | 72.1 |
| Years 5 | 98 | 75 | 76.5 |

Source: PeopleSoft Table PS_LV_CNR_DEGREES
PS_LV_CNR_CP
PS_LV_CNR_CR
Office of Decision Support, December 2018

Using the data in the tables above, please answer the following questions:

1. Are trends in 6-year cohort graduation close to the University's goals (UNLV's undergrad goal is 50%)?

This is a graduate program, but yes, our graduation trends look to be going in the positive direction since 2014.

2. If not, what is being done to reach the goal?

N/A

3. Discuss how and why the graduation rate is changing.

The major change in our graduation numbers was a dip in graduation rate that occurred in 2014. We can't speak to why the number dipped in that year. However, since then, our numbers have returned to previous rates while incrementally improving.

4. Additional comments:

VII. Relationship to Other Programs

1. What relationship does your program have to other programs (e.g. articulation, transfers, collaborations, partnerships) in the NSHE system?

In the past, the UNLV B.S. Arch program has had healthy transfer-student relationships with the two-year architecture studies programs at both the CSN, and TMCC, community colleges. However, recently CSN's administration has decided to eliminate the two-year architecture studies program. Approximately five years ago, TMCC also eliminated their two-year architecture program. However, during the last academic year, the SoA's Associate Director met with a representative from TMCC who has been charged with re-implementing that program so as to reengage a symbiotic transfer

relationship. The B.S. Arch program is the main “feeder” program for our Master of Architecture program.

2. What relationship does this program have to other programs at UNLV (e.g., collaborations, partnerships, affiliated faculty, General Education requirements, etc.)?

UNLV has provided School of Architecture programs the ability to build meaningful and productive relationships with scholars and students in other disciplines such as the Howard R. Hughes College of Engineering or the William F. Harrah College of Hotel Administration – routinely ranked 1st in the world. This fertile supportive environment has produced collaborations that resulted in a university wide minor and graduate certificate in Solar and Renewable Energies as well as a graduate concentration and a graduate certificate in Hospitality Design. Our faculty have also had a number of productive collaborations with UNLV’s Department of Art and the Greenspun College of Urban Affairs.

3. Additional comments:

N/A

VIII. Impact

1. What impact has this program had or will have in the following areas:

a) University

Projects such as the 2013 and 2017 U.S. DOE Solar Decathlon Competitions have had significant leadership from School of Architecture faculty and students, while substantially engaging other programs/units throughout the university. Furthermore, the great success of the 2013 UNLV Solar Decathlon House (DesertSol), which was the top-ranked U.S. entry and 2nd overall in that year’s competition (http://www.solardecathlon.gov/past/2013/final_results.html), allowed UNLV to engage its community in a very meaningful way by permanently displaying DesertSol at the Las Vegas Springs Preserve.

Similarly, the 2014 and 2015 U.S. DOE Race to Zero Student Housing Competition entries were led by School of Architecture faculty and students with collaboration from the Howard R. Hughes College of Engineering. The 2015 competition entry (Desert Sunrise), a service learning project that focused on the housing needs of the Moapa Band of Southern Paiutes, received a Design Excellence Award from the U.S DOE and was featured by President Len Jessup at the 8th National Clean Energy Summit (<http://www.cleanenergysummit.org/event-information/agenda>) and during his State of the University Address. The complexity of these projects also reinforces the program’s relationship with the local design community and the allied disciplines’ connection back to the institution at large.

We are currently working on the Solar Decathlon 2019-20 affordable housing project. The School of Architecture has been selected as one of seven U.S. universities/programs for this prestigious design and build competition and received a grant from the Department of Energy for \$135,000.

b) Community

A generous gift from David Howryla, a School of Architecture alumnus, allowed for the creation of the David G. Howryla Design Build Lab, which has made possible the curricular integration of design-build projects such as DesertSol in 2013, a ticket booth for the Shakespeare Festival at Lake Tahoe in 2016, and currently, a Utah artists' retreat project. The David G. Howryla Design Build Lab has activated underused laboratory space and reenergized an enclosed construction yard accessible to students and faculty of the School of Architecture and the Art Department.

The UNLV Downtown Design Center (DDC) is an extension of the School of Architecture facilities located in the Historic Fifth Street School. Through the activities and courses offered at the center, typically engaged in sponsored projects, the School of Architecture is able to strategically facilitate increased community engagement on behalf of UNLV.

c) Field

Increasing emphasis on paths toward licensure encourages the holistic development of our students by balancing their academic learning outcomes with professional internship objectives. Our graduates are well prepared and positioned to be leaders in our professional field of architecture. As AXP continuously adapts to changes in technology, industry, and society among others, the curriculum and advising has evolved to ensure students are engaged in their own path toward becoming architects, establishing records with NCARB early in their careers, and recording internship experiences often.

As well, our graduate faculty in the School of Architecture are composed of accomplished scholars and practitioners whose research and creative work engages regional, national and international trends in the field.

2. What are the benefits to the institution of offering this program?

UNLV's Master of Architecture program is the only accredited architecture program in the state of Nevada. As such, we are critical to the local and regional building industry and larger economy. We are a program that creates meaningful impact in our community (both our current students and faculty as well as our graduates who are quite literally shaping our city).

3. Provide examples of the integration of teaching, research, and service (e.g., faculty mentoring leading to student presentations at conferences, service learning classes, community service activities involving students, or other student activities and/or achievements that you think are noteworthy).

The examples provided in this paragraph simply highlight ways in which faculty have chosen to align their scholarly activities to the areas of specialization adopted by the School of Architecture. Given the areas of concentration and emphasis adopted by the M. Arch. program in recent years, the School of Architecture has embarked in design-build projects and community outreach activities that showcase the integration of sustainability issues relevant to Las Vegas and the Mojave Desert.

For example, after the great success garnered by UNLV's 2013 Solar Decathlon Competition, Assistant Professor Eric Weber has developed a research agenda focused around design-build and making (he

has received more than \$400,000 in extramural funding during his tenure at UNLV). Professor Alfredo Fernandez-Gonzalez, Director of the Natural Energies Advanced Technologies Lab and Coordinator of the Building Sciences & Sustainability Concentration, was contracted twice by Architecture 2030 to develop passive cooling swatches for the “2030 Palette” and then to customize and extend the outreach of this important resource to Latin America (total funding for these projects was \$15,000). He is also working on a grant proposal to build the 2015 Race to Zero Student Housing Competition entry in the Moapa Paiute Reservation (the proposal will be submitted in October to the Sloan Foundation).

Another excellent example of community engagement by School of Architecture faculty and students are the projects managed by UNLV’s Downtown Design Center (DDC). Under the leadership of Associate Professor Steven Clarke since December of 2014, the DDC has completed three externally funded projects that have received significant media attention (e.g., <http://lasvegasweekly.com/news/2016/feb/04/westside-story-the-legacyand-heart-of-a-historic/#/0> or <https://www.youtube.com/watch?v=CfZV7tkx83Y>) and have raised the profile of the School of Architecture.

In addition, as architecture is widely recognized as a public discourse, issues of community engagement and social responsibility offer distinct avenues for the integration of architectural teaching, research, & service. Community engagement and social responsibility are two important components of the education our students receive at UNLV. Projects such as UNLV’s Downtown Design Center’s HUNDRED Plan for the Historic Westside Neighborhood include several lessons in community engagement and social responsibility through efforts to influence smart growth and economic development. This project, developed with input from the community, advocates for the preservation of this historically significant African-American neighborhood and was recently adopted by City of Las Vegas for its new master plan.

Other examples of how our program fosters community engagement and social responsibility are:

- Students have competed in “Smart Cities Smart Communities,” and through civic engagement arrived at such sophisticated understandings of civic space that their work was awarded by the City of Las Vegas as meritorious.
- Another excellent example of community engagement and social responsibility is the Desert Sunrise Home for the U.S. DOE Race to Zero Competition, which applied knowledge in building sciences and sustainability to develop an environmentally conscious, cost-effective, and culturally significant housing design for the Moapa Paiute on a tribal reservation.
- The Hospitality Design studio’s emphasis on understanding the need for community integration in the planning of major resort developments has brought social responsibility into the design dialogue of some of the largest privately funded projects in the country and around the world. The unique work in this area has even attracted Fulbright Scholar applicants in sociology to seek residency in the program.

4. Additional comments:

N/A

IX. Productivity

1. Please provide an indication of faculty productivity appropriate for your unit (lists of publications by type, grants by type, performances by type, installations by type, etc.):

The following list includes funded research/creative activity (only the Principal Investigator is listed) that has gone through the UNLV Office of Sponsored Programs over the past two years. It is worth noting that extramural funding during the past two years was \$540,482.

- McCown, Vegas Valley Trails Map - \$15,000 (Outside Las Vegas Foundation)
- McCown, Interstate 11 Next Generation Corridor Pilot Study – \$9,000 (Arizona State)
- McCown, Southern NV Inventory of Sustainable Systems - \$75,000 (City of Las Vegas)
- Weber, Lake Tahoe Shakespeare Festival Ticket Booth - \$47,187 (NV Div. of State Parks)
- Clarke, HUNDRED Plan for Historic Westside Las Vegas – \$106,900 (Las Vegas Centennial)
- Clarke, Las Vegas Springs Preserve Playground - \$22,120 (LV Valley Water District)
- Nowak, Resort and Casino Rebranding Tower Exterior Study - \$13,440 (MGM Resorts International Global Gaming Development LLC)
- Clarke, Regional Trail Map - \$4,500 (Outside Las Vegas Foundation)
- Clarke, City of Las Vegas Trail Map - \$2,500 (Outside Las Vegas Foundation)
- Weber, The Mesa - \$244,835 (The Mesa Retreat Center, LLC)

Faculty Scholarship (Books)

- Lehmann, Steffen (2019). *Urban Regeneration: A Manifesto for Transforming UK Cities in the Age of Climate Change*. London: Palgrave-Macmillan.
- Oakley, Deborah; Heller, Robert; Salvadori, Mario (2016). *Salvadori's Structure in Architecture: The Building of Buildings, 4th Edition*. New York: Pearson.
- Ortega, Daniel; Anderson, Jonathon (2016). *Innovations in Landscape Architecture*. New York: Routledge.
- Vermillion, Joshua; Johnson, Jason (2016). *Digital Design Exercises for Architecture Students*. New York: Routledge.

2. Additional comments:

X. Quality

A. Admission and graduation requirements

1. Please insert program admission requirements from the current UNLV catalog. Due to display complications, this description must be typed into this form and not pasted from the Catalog.

Plan Admissions Requirements

Application deadlines

Applications available on the UNLV Graduate College website.

Each Master of Architecture program applicant must hold a baccalaureate or graduate degree from a regionally accredited college or international equivalent. Applicants must have a cumulative undergraduate GPA of 3.00 or higher. Applicants are also required to submit a design portfolio for review, a statement of intent, two letters of reference, and GRE scores of 146 or higher in the verbal section and 148 or higher in the quantitative section. The combined GRE score of these two sections

may be no less than 294. All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

The Master of Architecture program offers prospective students two paths:

1. For applicants holding a Bachelor of Science in Architecture (BS Arch), or its equivalent, the program offers a two-year degree path in the 4+2 program.
2. For applicants with academic backgrounds outside of architecture or holding a Bachelor of Arts in Architecture, the program offers an alternative path through the 3 year plus degree program. The duration of the 3+ path varies based on an individual student's academic background and preparation. Each student applying for admission will be individually assessed and provided a course of study.

Interested applicants can find detailed information about the Master of Architecture program directly from the School of Architecture's web site.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

2. Are there any updates that need to be made to the catalog and if so, what are they?

Yes, we need to remove the GRE requirement as well as add a writing sample to the list of admissions materials. These changes are currently making their way through the Curriculog system.

3. How many full-time advisors are available at the college level?

No full-time graduate advisors at the college level that we are aware of.

B. Outcomes and Assessment

1. Student Learning Outcomes and Program Assessment Plans and Reports by program concentration are listed at <http://provost.unlv.edu/Assessment/plans.html>. Please attach the most recent assessment report in the Appendix.

Attached as an Appendix.

2. Describe specific program changes made based on the program's evaluation of its assessment reports:

We are trying new ways to better address our 4th learning objective: *demonstrating an understanding of business principles for professional practice through a combination of courses and clinical internships, which focus on: Understanding professional conduct, project management, and stakeholder roles, and Learning business practices and legal responsibilities.* Both the faculty and the NAAB accreditation team found the evidence of these criteria lacking when examining relevant student work. As a result, we have agreed to distribute parts of this learning objective between three different courses in our program (rather than trying to cover all of this material in one course). In this

way, we hope to ensure that all relevant topics are covered with appropriate depth and that evidence of student understanding is captured within each course's outcomes. As this is a recent change, we don't yet have data to measure the success of this adjustment.

3. Has the program revised its curriculum such as changing prerequisites, adding or eliminating required or elective courses, or co-curricular experiences for the degree(s) in the last 5 years?

No curriculum changes (as mentioned in the description) in the last 5 years.

a) If yes, what changes were made and why?

N/A

4. Has the program revised course content or instructional approaches (pedagogy, technology) in the last 5 years?

a) If yes, what changes were made and why?

We are no longer delivering a concentration in Educational Facility Design. We will need to remove this concentration from the graduate catalog. In the future, we intend to add study abroad experiences for our graduate students in the Master of Architecture program starting with the Global Design Studio pilot in Mexico City this June (2019).

5. Describe any other changes made in the last 5 years (for example, advising) based on assessment reports:

None to report.

6. List and describe two specific improvements in student learning outcomes and why they represent forward movement.

We made two specific improvements in student learning outcomes as evidenced during our last disciplinary accreditation visit by NAAB (National Architectural Accrediting Board) :

1. We were found to have met 2 learning criteria that we missed the last visit dealing with student understanding and application of accessible design and life safety.
2. We met the four learning criteria under the topic of Integrated Design with distinction. This is the hardest set of SPCs to meet in the NAAB accreditation rubric and we excelled at them based off of the evidence provided in course syllabi and the direct examination of student work.

7. Additional comments:

N/A

XI. Conclusions, Self-Assessment

A. Faculty Review of self-study

1. On what date did the program and/or department faculty review this self-study?

In January 2019 we met as a faculty to review our curriculum and discuss its strengths and weaknesses. That discussion informed this report.

2. What were the results of the faculty review?

The faculty reviewed and approved the School's new mission statement and we discussed several new changes and improvements to our programs:

- Global Design Studios (study abroad opportunities);
- Reducing contact hours (from 12 to 9) for our 6-credit Design Studio courses (should note, this doesn't affect the curriculum or credit hours);
- Our new research labs structure;
- Graduate concentrations (what to keep, what to scrap, what to create new);
- The need to raise retention rates and grow student numbers and strategies for this.

3. What are the top 3 priorities and/or needs for the future development of the program?

Priority #1: Continual improvement of our curricular offerings.

Priority #2: Growth in numbers to sustain a vibrant, adaptable, and diverse curriculum that, in turn, attracts even more students.

Priority #3: We would like to be recognized in regional and/or national rankings for architecture programs.

4. What are the strengths of the program?

We have several main strengths:

- We enjoy a great relationship with our professional community (our stakeholders);
- We are highly engaged in the community (as mentioned in several of the responses earlier in the report);
- We are also engaged with many pressing needs of society (urbanization, sustainability, social needs, etc.)—cities can't solve these problems without architects.

5. What are the challenges facing the program?

Our biggest challenge is to incrementally grow in a sustained way. We understand that in order to have more resources we have to grow in enrollment but we also have to maintain quality and rigor. We also need to promote and market our School and Master of Architecture program more—locally, nationally, and internationally.

6. What recent additions, corrections, or other changes have been made to the program that reflect changes or developments in the field?

We have tried to be as comprehensive as possible with this report. At this time, there is nothing to add.

B. Other comments

1. Is there anything else you would like to discuss about the program?

N/A